

Curriculum Vitae

Dr. IRFAN ULLAH JAN

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Research Gate Profile:

https://www.researchgate.net/profile/Irfan_Jan

Google Scholar Citations:

<http://scholar.google.com.pk/citations?hl=en&user=HOkjEZ8AAAAI>

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Cumulative Scientific Impact Points:

85+

COMPETENCY STATEMENT

Dedicated and enthusiastic professional with excellent organizational and leadership skills in teaching, research, instruction, projects delivery to budget and to high quality, developing new initiatives, winning funding (from commercial, government and research sources), stakeholder analysis and liaison. Excellent problem solver, strong team member and accomplished speaker.

CAREER HIGHLIGHTS AND LEADERSHIP

I have BSc., and MSc. from the University of Peshawar, Pakistan, PhD from the University of Leicester, United Kingdom and have conducted Post-Doctoral researches at the Universität Wien, Vienna, Austria and University of Regina, Canada.

Previously, attached with the Geo-Services East, as a Geologist, and having the upstream industrial experience in the oil and gas-bearing sedimentary basins of Pakistan (including Upper, Middle and Lower Indus Basins) and UAE and in-depth knowledge of hydrocarbon bearing strata from these countries, I switched to academia in 2005 and progressed through the positions of Lecturer and Assistant Professor at the National Centre of Excellence in Geology, University of Peshawar, Pakistan.

My core research interest incorporates the petroleum geological, stratigraphic, and sedimentological investigation of the Permian-Triassic and Jurassic successions of Pakistan and their correlative studies across the Arabian and Indian plates. I have published numerous papers in the international well-reputed impact factor journals (including Q1 impact factor journals) and have delivered the outcomes of my research in several international conferences in Portugal, Canada, UAE, Poland, London, Italy, Greece, and The Netherlands.

Among the international awards I have received, the noteworthy are;

- 1. The British Geological Survey, United Kingdom's BUFI award for analytical research work at the University of Leicester, United Kingdom,***
- 2. The University of Leicester, United Kingdom's funds for analytical work during PhD,***
- 3. The Geological Society of London, United Kingdom's Edmund Johnson's funds for best PhD project in the Tethyan sedimentology and palaeontology in 2010, associated with a year fellowship of this oldest and prestigious geological society of the world and free access to the society's research journals,***
- 4. The UK-IODP steering committee funding to attend summer school at Urbino Italy in years 2008,***
- 5. The UK-IODP steering committee funding to attend summer school at Urbino Italy in years 2009 and***

6. The International Federation of the Palynological Society's fund to present at the 3rd International Palaeontological Congress, 28th June to 3rd July, 2010, London, UK.

I have worked as an Editor-in-Chief of the "Journal of Himalayan Earth Sciences" (an only geoscience category "X" recognized journal by HEC, in Pakistan till 2019/indexed by SCOPUS and THOMSON REUTERS) for 2 years and its Editor for 8 years, as member Editorial Board *International Journal of Economic and Environmental Geology* (HEC category "Y" journal), since January, 2020, as founding advisory board member *Journal of Mountain Area Research* and as member of the Higher Education Commission of Pakistan's Panel of the Quality Assurance Agency for policy making/evaluation of Natural Sciences journals for 5 years.

I manages several international collaborative research projects with researchers from the United Kingdom, Canada, Austria, New Zealand, Japan, Australia, China, USA, and India and have been rated as the productive scientist for year 2014 by the "Pakistan Academy of Sciences" and received "Dr. Shah Jehan Gold Medal in Earth Sciences: 2014" in a country-wide competition. I have availed significant country-wide positions (i.e., 64th in 2017 and 26th in 2016) in the "Productive Scientists of Pakistan Directories" issued by the Pakistan Council of Science, and Technology.

I have worked as Principal Investigator on **~Rs. 15.52 million** and as Co-Principal Investigator on **~Rs. 12.64 million** funded research projects. I am the lead of the sedimentology and tectonics on the **~Rs. 40 million** funded research project under the China Pakistan Economic Corridor Collaborative Research Grant (CPEC-CRG).

I have established state-of-the-art "Sedimentology and Palynology Laboratory" in my institute carrying instruments worthed **50 millions Rs.**, which is extending consultancy and research services in Asian region in sustainable manners. I am a member of several international scholarly societies namely; the Geological Society of London (GSL), the British Micropalaeontological Society (TMS), the Palaeontological Association (PALASS), the Commission Internationale de la Microflore du Palaeozoique (CIMP), the Society of Petroleum Engineers (SPE), the Asian Council of Science Editors (ASCE), and the Association of Professional Engineers and Geoscientists of Alberta, Canada. I have chief organized, and co-organized several international conferences, seminars, and workshops and is HEC approved PhD supervisor in geosciences.

I have worked as Consultant Geologist for oil, and gas and Cement industries and have lead a cumulative **~Rs. 50 million** commercial projects/consultancies as Lead Consultant with Oil & Gas Development Company Limited, Pakistan, Orient Petroleum Limited, Pakistan Mari Petroleum Limited, Pakistan & Pakistan Petroleum Limited, Europe and Pakistan, Schlumberger Oman/Gulf & Pakistan, Shenkai Petroleum Limited Pakistan & MOL. B.V. Pakistan. Within the Cement sector, I have worked for OMNI, FTIMAH and SITARA Groups.

CORE SKILLS

- Teamwork
- Managerial skills
- Coordination skills
- Administrative skills
- Time management
- Project management
- Soft skills
- Interpersonal communication skills
- Computer proficiency
- Strategic planning
- Scientific and analytical writing skills
- Excellent manuscript and report writing skills
- Publication ethics
- Strong publication record
- Scientific collaboration and foreign networking
- Curriculum development
- Academic leadership
- Financial planning
- SGD's management

INTERNATIONAL/NATIONAL AWARDS, RECOGNITIONS, ACHIEVEMENTS AND DISTINCTIONS

1. Upgraded and maintained the Journal of Himalayan Earth Sciences for 6 consecutive years in the HEC Pakistan's "X" category as Editor-in-Chief and Editor till 2019.

2. Aailed 64th position in 2017 and 26th position in 2016 in the “Productive Scientists of Pakistan Directories” issued by the Pakistan Council of Science, and Technology, Pakistan.
3. Aailed the Pakistan Academy of Sciences’ Dr. Shah Jehan Medal (2014) for young scientist under 40 years of age for research contribution in earth sciences, complimented by a gold medal, certificate and cash prize.
4. The Geological Society London’s Edmund Johnson Fund for best PhD project in Tethyan sedimentology and palaeontology 2010, complimented by one year free fellowship by the society for year 2010–2011 and free subscription to Geol. Soc. Journals.
5. The British Geological Survey UK’s funding to support analytical work during the course of the PhD studies.
6. The University of Leicester Department of Geology funds for analytical work during the course of doctoral studies.
7. The Pakistan Higher Education Commission Scholarship for PhD studies at University of Leicester, UK (2007).
8. Aailed 3rd position in the order of merit in MSc. (Geology) 2003.
9. Aailed 3rd position in the order of merit in BSc. (Hon) Geology 2002.

1. Work Experience

1.1. Post Doctoral Researcher

Department of Geology, University of Regina, Canada (5th December, 2019 to March 31st, 2022).

Key Responsibilities as Sabbatical Researcher:

- International research collaborations in geosciences.
- Hydrocarbon potential analysis of the geologic units within the Upper Indus Basin of the northern Pakistan.
- Analysing the sedimentological and stratigraphical properties of the geologic units within the Upper Indus Basin of the northern Pakistan.
- High impact data analysis in geoscience and joint research publications with the consortium of geoscientists from Canada and China.

1.2. Associate Professor

National Centre of Excellence in Geology (27th August, 2018 to 4th December, 2019).
University of Peshawar, Pakistan

Key Responsibilities as Associate Professor:

- Conduct commercial consultancy/advisory to understand the petroleum prospects of various sedimentary basins of Pakistan, involving mapping, geochemical analysis and reservoirs studies and act to bridge the university and industry.
- Develop and manage funded research projects from idea inception, through data collection, analysis, interpretation, recommendations, and completion to the funders’ satisfaction.
- Manage the technical and financial aspects of the research projects, i.e., managing cash flows’ timeliness finances and audit.
- Design and develop post-graduate courses, keeping in the view the current day requirements of research.

- Conduct commercial consultancy/advisory to understand the mineral prospects of various tectonic zones of Pakistan, involving mapping and geochemical analysis.
- Conduct post-graduate teaching, covering major courses, i.e., sedimentology, sedimentary geology, mineralogy and paleontology to discuss the application of basic principles of the subjects in real clastic depositional systems.
- Supervise MS/PhD research theses to understand the mechanisms of development of various clastic reservoir systems of the Paleozoic, Mesozoic and Cenozoic successions of Pakistan.
- Research the development of clastic reservoirs in the background of Carboniferous-Permian Ice-House System to understand their potential as petroleum systems.
- Investigate the paleogeographic development of the Pakistan through Earliest Carboniferous to Late Permian, using the range of fossilized palynomorphs.
- Use industrial software for understanding petroleum systems.
- Use computer modelling for volumetric reserve estimation.
- Research to understand the source rock potential of various strata of Pakistan, involving geochemical studies, total organic carbon analysis, rock-eval and palynofacies analyses.
- Investigate the reservoir features of rocks involving visual and plug porosity analysis and permeability studies.
- Undertake sequence stratigraphic and microfacies analysis of Permian carbonates of Pakistan.
- Petrographical analysis to understand provenance of the sedimentary strata of Pakistan.
- Conduct the petrophysical analysis to evaluate reservoirs features of the sedimentary strata of Pakistan.

1.3. Post Doctoral Researcher

Department für Geodynamik und Sedimentologie,
Universität Wien, Vienna, Austria

(23rd November, 2018 to 20 August, 2018).

Key Responsibilities as Sabbatical Researcher:

- International research collaborations in geosciences.
- Sedimentological analysis of the geologic units within the Upper Indus Basin of the northern Pakistan.
- Analysing the sedimentological and stratigraphical properties of the geologic units within the Upper Indus Basin of the northern Pakistan.
- High impact data analysis in geoscience and joint research publications with the consortium of geoscientists from Austria and Pakistan.

1.4. Associate Professor

National Centre of Excellence in Geology
University of Peshawar, Pakistan

(5th January 2016 to 22nd November, 2017).

1.5. Assistant Professor

National Centre of Excellence in Geology
University of Peshawar, Pakistan

(13th April, 2012 to 4th Jan., 2016).

Key Responsibilities as Assistant Professor:

- Manage the technical and financial aspects of the research projects, i.e., managing cash flows' timeliness finances and audit.
- Conduct commercial consultancy to understand the petroleum prospects of various sedimentary basins of Pakistan, involving mapping, geochemical analysis and reservoirs studies and act to bridge the university and industry.
- Conduct commercial consultancy to understand the mineral prospects of various tectonic zones of Pakistan, involving mapping and geochemical analysis.
- Conduct post-graduate teaching, covering major courses, i.e., sedimentology, sedimentary geology, mineralogy and paleontology to discuss the application of basic principles of the subjects in real clastic depositional systems.

1.6. Research Associate

National Centre of Excellence in Geology
University of Peshawar, Pakistan

(22nd Sept., 2005 to 12th April, 2012).

Key Responsibilities as Research Associate:

- Use industrial software for understanding petroleum systems.
- Use computer modelling for volumetric reserve estimation.
- Research to understand the source rock potential of various strata of Pakistan, involving geochemical studies, total organic carbon analysis, rock-eval and palynofacies analyses.
- Investigate the reservoir features of rocks involving visual and plug porosity analysis and permeability studies.
- Undertake sequence stratigraphic and microfacies analysis of Permian carbonates of Pakistan.
- Petrographical analysis to understand provenance of the sedimentary strata of Pakistan.

1.7. Well Site Geologist

Geo-Services East, Pakistan

(10th July, 2004 to 21st Sept., 2005).

Key Responsibilities as Wellsite Geologist:

- Supervising the well site operations and identifying formation tops.
- Supervising the correspondence with the head office of the client to update on the well development.
- Coordinate on the target achieved regarding drilling operations.
- Work in the head office of the firm to help in business development and satisfy the client.
- Undertake the chemical and paleontological analysis of the samples from the well and coordinate with the head office of the client to update the progress on the timeline achieved.

1.8. Junior Mudlogger/Wellsite Geologist

Geo-Services East, Pakistan

(1st July, 2003 to 9th July, 2004).

Key Responsibilities as Junior Wellsite Geologist:

- Assist in supervising the well site operations and identifying formation tops.
- Assist in supervising the correspondence with the head office of the client to update on the well development.

1.6. Junior Mudlogger/Wellsite Geologist

Geo-Services East in Pakistan and United Arab Emirates

(1st July, 2003 to 9th July, 2004).

1.7. Additional Work Experience (National/International)

1.7.1. Under-Graduate Course Demonstrator (UK)

Department of Geology, University of Leicester, United Kingdom (taught Micropaleontology and Depositional Environments).

1.7.2. Under-Graduate Course Demonstrator (UK)

Department of Physics and Astronomy, University of Leicester, United Kingdom (taught Inter-Disciplinary Sciences).

1.7.3. Attachment at Oil and Gas Development (OGDCL), Islamabad

4 months attachment with Prospect Generation Department of Oil and Gas Development Company Limited, Pakistan with 1-month attachment with G&R labs., of OGTI, Pakistan, combined with 15 days attachment with Geological Well Site Department (GWS) of OGDCL, Pakistan.

2. Qualification

2.1. PhD (Geology)

Department of Geology, University of Leicester, United Kingdom (09/2007-02/2012)

PhD. thesis title: Investigating the palynostratigraphy and palaeoenvironments of the Palaeotethyan Carboniferous-Permian succession of the Salt Range, Pakistan.

2.2. MSc (Geology) /3rd Position in order of merit

Department of Geology University of Peshawar, Pakistan (2002-2003).

Msc. thesis title: *The Carbonate Sedimentology of the Eocene Kirther Formation, the Kirther Fold belt Baluchistan, Pakistan.*

2.3. BSc. (Hons; Geology)/3rd Position in order of merit

Geology: Department of Geology University of Peshawar, Pakistan (1999-2002).

3. Certifications (Continuing Education)

3.1. Project Management Principle and Practices (Using Coursera)

Course on Initiating and Planning Projects.

Course in Budgeting and Scheduling Projects.

Course on Managing Project Risks and Change.

Capstone on Project Management Project.

3.2. Strategic Management and Leadership (Using Coursera)

3.2.1. Foundations of Everyday Leadership.

3.2.2. Applications of Everyday Leadership.

3.2.3. Designing the Organization.

3.2.4. Managing the Organization.

4. Diploma(s)

4.1. Dental Office Administration

A 2 years Dental Office Administration Diploma from the Centre for Distance Education, Nova Scotia, Canada with the following courses/certifications completed.

4.1.1. Computer Proficiency: MS Office 2019 (i.e., Word, Access, Excel and Project) expert with MS Word 2019 certification.

4.1.2. Business English & Communications: Certification and courses in Business English & Communications.

4.1.3. Professionalism & Ethics: Certification and courses in Professionalism and Ethics.

4.1.4. Occupational Health & Safety: Certification and courses in Occupational Health & Safety

5. Research Productivity (Summarized)

1. Research projects = **8** (As Principal Investigator= 3, as Co-Principal Investigator= 4 and as member team= 1).
2. Funds generated as “Principal Investigator”, “Co-Principal Investigator” and as Team sub-lead => **110** million Rs.
3. International travel grants availed= **7**.
4. PhD produced= **3** (Main supervision= 2 & Co-supervision= 1).
5. MS produced = **16** (Main supervision= 15 & Co-supervision= 1).
6. PhD and MS under supervision = **5** (4 PhD & 1 MS).
7. Conferences/workshops and seminars convened/organized/co-organized= **34** (As Convener= 1, As Chief organizer= 3 and As Co-organizer= 28).
8. Journal Editorship= **2** (Journal of Himalayan Earth Sciences HEC Category “X” journal/SCOPUS and Thomson Reuters indexed journal and Journal of Economic and Environmental Geology).
9. National and international honors and awards= **8**.
10. International/national courses/workshops attended = **9** (International= 7 and National= 2).
11. Oil, and gas and industrial rock commercial consulting/advisory services conducted = **11** (~35 million PKR funds generated).
12. Contribution to the institutional strengthening and human resources developed= **3**.
13. Wining funds= **2**.
14. International/national professional bodies memberships= **8**.
15. International scientific collaborations= **11**.
16. National policy making/academic/administrative committees memberships= **26**.
17. Journal volumes edited (As Editor) = **22** (*Journal of Himalayan Earth Sciences, HEC category “X” journal*).
18. Abstract book/volumes edited/co-edited (As Editor) = **5**.
19. Published research articles= **60** (Impact Factor/SCI indexed= 40, Scopus indexed/HEC Category X=17 and HEC Category Y= 3).
20. Published conference abstracts= **53**.
21. Invited talks= **3**.

22. Science popularization/newsletters= **6**.
23. Referee on international and national Journals= **10**.
24. HEC approved PhD supervisor.

6. Research Projects Completed/In Progress

6.1. As Principal Investigator

1. "Investigating the stratigraphy, facies and 3D architecture of the Carboniferous-Permian successions of the Salt Range, Pakistan: An analogue for the oil-bearing reservoir-strata of the Arabian Peninsula". The Higher Education Commission of Pakistan's National Research Program for Universities **9.02 millions Rs.** research grant as Principal Investigator with Prof. Michael Stephenson from the British Geological Survey, United Kingdom as Co-Principal Investigator (**Completed**). Project No. 20-2706/ R & D/HEC/12.
2. The sedimentological investigation of the Tobra Formation, Salt and Khisor ranges, Pakistan. A pilot proposal to study the sedimentology of the successions and relate them to the oil-bearing age-equivalent reservoir strata of the Arabian Plate. Funded from the large British Council DELPHE grants awarded to Prof. Dr. Michael Petterson, University of Leicester, United Kingdom (The pilot project amounted **0.75 million Rs.**) (**Completed**).
3. "The stratigraphic studies of the Carboniferous-Permian-Triassic succession of Pakistan" a China University of Geosciences, State Key Laboratory, China funded **5.75 millions Rs.** research project with Prof. Zhong as Principal Investigator from China and Dr. Irfan U. Jan as Principal Investigator from Pakistan (**Completed**).

6.2. As Co-Principal Investigator

1. "Source rock and unconventional hydrocarbon reserve potential of Mesozoic and Tertiary sedimentary succession of Kohat sub basin, Upper Indus Basin, Pakistan". The National Centre of Excellence in Geology **0.3 million Rs.** research grant as Co-Principal Investigator (**Completed**).
2. "Evaluation of potential source rocks using 1-d maturity modelling in lower Indus Basin, Pakistan". The National Centre of Excellence in Geology **0.3 million Rs.** research grant as Co-Principal Investigator (**Completed**).
3. Shale gas potential of the Kohat Sub-basin, Indus Basin, Pakistan, a **6.34 millions Rs.** Pakistan Science Foundation funded project (**In Progress**). Project No. PSF/Res/KPK/Earth (96).
4. Integrated stratigraphical, paleoenvironmental and hydrocarbon potential analysis of the upper Paleocene-Eocene succession of Kohat Plateau and Sulaiman Range in the context of India-Asia collision, Indus Basin Pakistan. A HEC-NRPU funded **5.7 million Rs.** research project (**In Progress**). Project No. 7888/KPK/NRPU/R & D/HEC/2017.

6.3. As team member and Tectonic Geology Lead

1. Climate change-induced multi-hazards risk mitigation for marginalized communities along the CPEC in northern Pakistan. A **40 million Rs.** research project funded under CPEC- Collaborative Research Grant (CPEC-CRG). (**In Progress**).

7. International Travel Grants Availed

1. The International Commission of the Palaeozoic Microflora fund to present research work at the CIMP 2010 conference at Institute of Geological Sciences, Warsaw Poland.
2. The International Federation of the Palynological Societies fund to present research work at the 3rd International Palaeontological Congress, 28th June to 3rd July, 2010, London, UK.
3. The Department of Geology, University of Leicester, UK funds to attend the CIMP2010 conference at Institute of Geological Sciences, Warsaw Poland.

4. The British Geological Survey-Funding-Initiative Funding for attending the geological workshop at Milos Island- Greece from 8th to 18th May 2009.
5. The Department of Geology, University of Leicester, UK funds to attend the CIMP Faro-2009 conference at University of Algarve, Portugal.
6. The UK-Integrated Drilling Program (UK-IODP) steering committee funding to attend summer school at Urbino, Italy 2009.
7. The UK- Integrated Drilling Program (UK-IODP) steering committee funding to attend summer school at Urbino, Italy 2008.

8. PhD Students Supervision (Completed/In Progress)

8.1. Main Supervision

1. Mr. Syed Irfan Hashmi: Thesis title “An integrated reservoir potential assessment and tectonostratigraphic reconstruction from Lower to Middle Cretaceous sediments, NW Indus Basin, Pakistan” (**Graduated in 2022**).
2. Mr. Shuja Ullah: “Stratigraphic and petroleum system analyses of the Sembar and Goru formations, Sulaiman Range, Pakistan” (**Graduated in 2023**).
3. Mr. Mukhtiar Ghani: Thesis title “Understanding the tectono-stratigraphy of the Pashin Basin, Baluchistan” (Enrollment year= 2017).
4. Waqar Ahmad: “Risk Assessment of Debris Flow Potential Dangers in the Hunza District, Northern Pakistan” (Enrollment year= 2017).
5. Mr. Waqas Naseem: “Shale gas potential of the Paleocene-Eocene succession of the Potwar Sub-basin, Indus Basin, Pakistan” (Enrollment year= 2018).

8.2. Co-Supervision

1. Miss Shehla Fazal: Thesis title “Accelerated microbial rehabilitation of petroleum waste contaminated soils in Kohat Plateau Khyber-Pakhtunkhwa, using low-cost techniques” (**Graduated in 2019**).
2. Mr. Asim Shahzad: Thesis title “Hydrocarbon and microbial studies of the Mesozoic succession of the Upper Indus Basin, Pakistan” South Centrel University, China (**In progress**).

9. MS Students Supervision (Completed/In Progress)

9.1. Main Supervision

1. Mr. Hafiz Shahid Hussain: Thesis title “Microfacies and palynofacies studies to decipher sequence stratigraphy of the Middle- to Late-Permian Zaluch Group, Pakistan; An analogue for the hydrocarbon bearing strata of the Middle East” (**Graduated**).
2. Mr. Azeem Shah: Thesis title “Paleoenvironmental analysis, regional stratigraphic correlation and sequence modeling of the Early Dandot Formation, Salt Range, Pakistan” (**Graduated**).
3. Mr. Babar Siddique: Thesis title “Reservoir evaluation of the Cretaceous-Palaeogene succession, Tal Block, NW, Kohat, Pakistan” (**Graduated**).
4. Mr. Muhammad Ishaq: Thesis title “Integrated petrographical and petrophysical analysis to evaluate Sakesar Limestone, Potwar, Plateau, Punjab, Pakistan” (**Graduated**).
5. Mr. Naveed Akhtar: Thesis title “Sedimentological and petrophysical studies of Khewra Sandstone Missa Keswal Oil Field, Potwar, Pakistan” (**Graduated**).
6. Mr. Nasar Khan: Thesis title “Source rock potential evaluation of the Early Jurassic Datta Formation, Salt Range, Pakistan” (**Graduated**).

7. Mr. Mukhtiar Ghani: Thesis title "3-Dimensional facies modeling of the Permian strata, Salt Range, Pakistan; an analogue studies to the Arabian hydrocarbon reservoirs" (**Graduated**).
8. Mr. Ahmad Zeeshan: Thesis title "The Permo-Triassic succession of Pakistan; sedimentological implications" (**Graduated**).
9. Mr. Waqar Ahmad: Thesis title "Bio-Chemostratigraphy of the Cretaceous Parh Limestone of Lower Indus Basin, Pakistan" (**Graduated**).
10. Mr. Subhanullah: Thesis title "Sequence stratigraphy and global correlation of the Permian Warchha and Sardhai formations, Salt Range Pakistan" (**Graduated**).
11. Mr. Sohail Qaiser: Thesis title "Source rock assessment of the Eocene Nammal Formation, Salt Range, Pakistan" (**Graduated**).
12. Mr. Attaullah: Thesis title "Integrated sequence stratigraphic framework of the Tobra and Dandot formations, Salt Range, Pakistan" (**Graduated**).
13. Mr. Abdullah Khan Wazir: Thesis title "Paleoenvironmental analysis of the Cambrian succession of Peshawar Plain" (**Graduated**).
14. Mr. Adnan Wazir: Thesis title "Biostratigraphy and depositional environment of the Sulaiman Group sediments, Sulaiman Range, Pakistan" (**Graduated**).
15. Mr. Abdullah: Thesis title "Depositional and stratigraphic controls on reservoir quality of Middle Triassic Tredian Formation, Surghar Range and western Salt Range, Upper Indus Basin, Pakistan" (**Graduated**).
16. Mr. Khalil: Thesis title "Paleogeographic reconstruction of the Miocene Siwaliks strata of the Upper Indus Basin" (Enrollment year= 2018/ **In Progress**).

9.2. **Co-Supervision**

1. Mr. Muhammad Muslim: "Provenance and reservoir Characterization of Gurguri Sandstone, Northwestern Kohat, Pakistan." (**Graduated**).

10. Conferences/Seminars/Workshops/Short Courses Chief Organized/Organized/Co-Organized

1. Convener "Earth Sciences Pakistan: 2020" a 6th international conference organized at the Baragali Campus, University of Peshawar, Pakistan.
2. Conducted a one-day workshop (as resource person) at the Karakoram International University, Gilgit Baltistan on "Scholarly Journals, their selection, academic writing and Journal Editing" on 1st August, 2019.
3. Co-organized a three-day international conference at the City University of Science and Information Technology, Peshawar, Pakistan (28-30th, December 2016) "2nd International Conference in Emerging Trends in Engineering, Management and Sciences; 2016"
4. Co-organized a one-day international conference at the National Centre of Excellence in Geology, University of Peshawar, Pakistan (3rd, October 2016) "2nd International Conference on Sustainable Utilization of Natural Resources SUN-R 2016"
5. Chief organized a three-day international conference at the Baragali Summer Campus of the University of Peshawar, Pakistan (15-17th, July, 2016) "Earth Sciences Pakistan; 2016"
6. Co-organized a three-day international conference at the City University of Science and Information Technology, Peshawar, Pakistan (28-30th, December 2014) "1st International Conference in Emerging Trends in Engineering, Management and Sciences; 2014"
7. Co-organized a three-day international conference at the Baragali Summer Campus of the University of Peshawar, Pakistan (29th-31st, August, 2014) "Earth Sciences Pakistan; 2014"

Co-organized a one-day international conference at the Pearl Continental Hotel, Peshawar, Pakistan (11th Feb., 2013) “Sustainable Utilization of Natural Resources, Khyber Pakhtunkhwa and FATA; 2013”.

8. Chief organized Geoscience Information System for Natural Hazard Management; A four days international workshop organized under the British Council’s DELPHE funds for the faculty members of Kabul University, Kabul Polytechnic University and Education University, Afghanistan (12-16th Feb., 2013).

Co-organized a one-day workshop under the Higher Education Commission of Pakistan and US Department of State at the Pakistan Academy of Sciences, Islamabad, Pakistan (18th December 2013) “Towards better understanding of gold mineralization of the northern areas of Pakistan”

9. Co-organized a two-day international conference at the Baragali Summer Campus of the University of Peshawar, Pakistan (24-25th, June. 2012) “Earth Sciences Pakistan; 2012”.

10. Chief organized an International Siwalik Seminar/Webinar Series consisting of 19 talks from speakers from United States of America, United Kingdom, Pakistan, India, Germany and The Netherlands. The program lasted for more than 4 months with one talk every week using the registered Microsoft Team Meeting Module. The talks were attended by well above 500 participants from the 6 continents. The series is recorded using the YouTube Channel which can be retrieved by the future participant and is detailed as follows;

- **Prof. Bob Reynolds** (Colorado School of Mines, USA) summarizing and presenting the abstract of 19 talks extending over 4 months on the Siwalik strata;
Video Link: <https://www.youtube.com/watch?v=gFuRgHePNqA>
- **Prof. Ardvait Jukar** (Yale University; USA) discussing the “Plio-Pleistocene faunal changes in the Indian sub-continent and the assembly of the modern large herbivore guild”.
Video Link: <https://www.youtube.com/watch?v=DAVL37jQ8N8&t=2s>
- **Dr. Shahid Iqbal** (Department of Earth Sciences, Quaid e Azam University, Islamabad, Pakistan) discussing the “Paleoenvironmental and Provenance studies of Pleistocene-Holocene sediments of Peshawar Basin”.
Video Link: <https://www.youtube.com/watch?v=0Tanbd7gWM8>
- **Prof. Mona Lisa** (Department of Earth Sciences, Quaid e Azam University, Islamabad, Pakistan) discussing the “Seismotectonics and Seismic-Hazard assessment of Northwestern Himalayan, Pakistan”
Video Link: https://www.youtube.com/watch?v=sXHDls1YD_o
- **Prof. Peter Zeitler** (Department of Earth and Environmental Sciences, Lehigh University, USA) discussing the “What's come down must have gone up; linking Siwaliks and their Source”.
Video Link: <https://www.youtube.com/watch?v=tZ2r6w0YFEk>
- **Prof. Jason Head** (Department of Zoology, University of Cambridge, UK) discussing the “Reptile faunas of the Siwalik Group: Implications for deep-time environmental change and the evolution of South Asian Herpetofaunas”.
Video Link: https://www.youtube.com/watch?v=veBIN5_NF_A&t=531s
- **Dr. Samina Siddiqui, and Irfan U. Jan** (National Centre of Excellence in Geology, University of Peshawar, Pakistan) discussing the “Petroleum systems in the Himalayan foothills, Pakistan: Oil production and clean-up techniques”.
Video Link: https://www.youtube.com/watch?v=1sRxYQ33_nU
- **Dr. Anna ‘Kay’ Behrensmeyer** (Research Curator in Paleobiology, Smithsonian Institution, Washington DC, USA) discussing the “Fluvial architecture, landscapes, and fossil preservation in the Miocene Siwalik Sequence of Northern Pakistan”.
Video Link: <https://www.youtube.com/watch?v=Gukzjq3Yxgo&t=390s>

- **Prof. Andrew Meigs** (College of Earth, Ocean, and Atmospheric Sciences, Oregon State University, Corvallis, OR, USA) discussing the “Active tectonics and earthquake geology of the NW Himalaya”.
Video Link: <https://www.youtube.com/watch?v=061RoTNGWzk&t=1s>
 - **Prof. Peter Clift** (Petroleum Geology, Louisiana State University, Baton Rouge, Louisiana, USA) discussing the “Tectonic and climate controls on sediment flux to the Indus Submarine Fan”
Video Link: <https://www.youtube.com/watch?v=YvDYSNJUUB4>
 - **Dr. Rajeev Patnaik** (Panjab University in Chandigarh, India) discussing the “Biostratigraphic and paleoecological implications of Neogene and Quaternary mammalian fauna of India”.
Video Link: <https://www.youtube.com/watch?v=xV9lgydngzU>
 - **Dr. Muhammad Akbar Khan** (University of Punjab) discussing the “Mammalian paleontology of the Siwalik Potwar Plateau, Pakistan”.
Video Link: <https://www.youtube.com/watch?v=UPX4gAoITzg>
 - **Prof. Doug Burbank** (University of California Santa Barbara, California, USA) discussing the “Late Cenozoic tectonics, climate and deposition: Himalayan intermontane and foreland basins”.
Video Link: <https://www.youtube.com/watch?v=aibQAUV8aD8>
 - **Dr. Hummad Ghani** (University of Potsdam, Germany) discussing the “Linkage between structural modeling and low temperature thermochronology to constrain structural evolution of the Kohat-Potwar fold and thrust belts”.
Video Link: <https://www.youtube.com/watch?v=i45bm2ftptE>
 - **Prof. Catherine Badgley** (Department of Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, Michigan, USA) discussing the “From fossils to ecosystems in the Siwalik record of Pakistan”.
Video Link: <https://www.youtube.com/watch?v=jX1TZTXBs4>
 - **Dr. Abdul Qayyum** (Utrecht University, The Netherlands) discussing the “The India-Asia collision and its impact on the development of the northwestern Himalayan mountain front”.
Video Link: <https://www.youtube.com/watch?v=jzvMERDrono>
 - **Prof. John C. Barry** (Department of Human Evolutionary Biology, Harvard University, Cambridge, Massachusetts, USA) discussing the “The Yale/Harvard/Geological Survey of Pakistan collaboration and the importance of paleontology in the Siwaliks”.
Video Link: <https://www.youtube.com/watch?v=IEl0VqdUjjM>
 - **Prof. Gary D. Johnson** (Dartmouth College, Hanover, NH) discussing the “History of the Dartmouth/Peshawar Project and the importance of the stratigraphic record in the Siwaliks”.
Video Link: <https://www.youtube.com/watch?v=-8yxU-TwwzU>
 - **Prof. Bob Reynolds** (Colorado School of Mines, USA) discussing the “Introduction to Siwalik stratigraphy and geology of Pakistan”.
Video Link: <https://www.youtube.com/watch?v=7zQk4Wqo0LI&t=1337s>
11. Chief organized an International Talk on “Carboniferous and Permian of the Levant and the Middle East: controls on reservoir and source rocks”
- **Prof. Michael Stephenson** (British Geological Survey, UK) discussing the “Significance of palynology in resolving the geological problems”.
Video Link: <https://www.youtube.com/watch?v=XxIDH02Uhqk>
 - **Prof. Michael Stephenson** (British Geological Survey, UK) discussing the “High resolution stratigraphy of argillaceous rocks using combined palynology, palnofacies and isotopic techniques”.
Video Link: <https://www.youtube.com/watch?app=desktop&v=lrDm3lM0WMg&feature=youtu.be>

12. Chief organized an International Webinar series on “Indus Water System” consisting of talks from researchers, scientists, policy makers and dignitaries from regulatory and governing bodies. The talks were attended by well above 1000 participants from around the world. The series is recorded using the YouTube Channel which can be retrieved by the future participant and is detailed as follows.
- **Prof. Ashraf** (Chairman Pakistan Council of Research in Water Resources) discussing the “Water issues of Pakistan and the way forward”.
Video Link: https://www.youtube.com/watch?v=SrmtuUEp_Q4
 - **Prof. Altaf Ali Sial** (Chairman Department of Land and Water Management Department, Sindh Agriculture University, Jandoram, Pakistan) discussing the “Proposed Sindh Barrage: Boon and Bane”.
Video Link: <https://www.youtube.com/watch?v=9XG6NHZi1LA>
 - **Dr. Muhammad Abubakar** (Head Department of Electrical Engineering, Lahore University of Management Sciences, Pakistan) discussing “From behavior to policy: modelling the socio-hydrology of the Indus Basin for demand”.
Video Link: <https://www.youtube.com/watch?v=3bwvrhsbi8o&t=303s>
 - **Prof. Shahid Azam** (University of Regina, Canada) discussing the “Water management in Agriculture and Mining”.
Video Link: <https://www.youtube.com/watch?v=HS3CZw7Tu64&t=316s>
 - **Dr. Syed Mobasher Aftab** (Professionals Hydrogeologist, Canada) discussing “The surface and groundwater scenario of Balochistan”.
Video Link: <https://www.youtube.com/watch?v=F5mRHXV-hZY&t=60s>
 - **Dr. Ali Tauqeer Sheikh** (Independent Expert on Climate Change) discussing “The Climate-proofing Indus water treaty”.
Video Link: <https://www.youtube.com/watch?v=lu792iRfXL8>.
 - **Mr. Nisar Memon** (Former Senator and Federal Minister & CEO Water Environment Forum) discussing “The challenges of lower Indus Basin, Indus Delta”.
Video Link: <https://www.youtube.com/watch?v=m7iJYfmRkOE&t=164s>
 - **Dr. Eng. Fazlullah Akhtar** (Senior Researcher at the Centre for Development Research, University of Bonn, Germany) discussing “The Evaluation of GRACE derived groundwater storage changes in different Agro-Ecological Zones of the Indus Basin”.
Video Link: <https://www.youtube.com/watch?v=1pNLRzPEw-8&t=130s>
 - **Dr. Arshad H. Abbassi** (Independent Energy and Power Sector Specialist) discussing “The Inland water transport system in Pakistan”.
Video Link: <https://www.youtube.com/watch?v=jxely6b3Gqk>
 - **Prof. Mathias Winiger** (Professor, University of Bonn, Germany) discussing “The Himalayan-Hindukush-Karakoram landscapes under transition: Are climate dynamics or changes the dominant factors?”.
Video Link: <https://www.youtube.com/watch?v=kEPvfxorEyg>
 - **Prof. Attaullah Shah** (Vice Chancellor, Karakoram International University, Gilgit-Baltistan) discussing “The impacts of spatio-temporal changes of glaciers on the water resources of HKH region”.
Video Link: <https://www.youtube.com/watch?v=07CrAEzg4oM&t=171s>
 - **Dr. Khanzaib Jadoon** (Professor and HOD, Department of Civil Engineering, IIUI, Pakistan) discussing “The challenges and opportunities for sustainable groundwater Management in Pakistan”.
Video Link: <https://www.youtube.com/watch?v=0Gblh-oplB4>
 - **Dr. Imran Saqib** (Director at WWF for Nature, Pakistan) discussing “Envisioning water sensitive cities urban landscape”

Video Link: <https://www.youtube.com/watch?v=lcmGYVY6VHY>

- **Dr. Muhammad Zeeshan** (Research Fellow at the Department of Civil Engineering, IIUI, Pakistan discussing “Groundwater storage depletions in South Asia from GRACE and ground observation”
Video Link: <https://www.youtube.com/watch?v=uDP3310tTuo>
- **Dr. Farid Alam** (Director Asia Funds) discussing “The political economy analysis of agriculture water use in Lower Indus Basin”
Video Link: <https://www.youtube.com/watch?v=qk3wrG7xh2M&t=252s>
- **Dr. Rasool Bux Mahar** (Director US-Pakistan Centre for Advanced Studies, Mehran University of Engineering & Technology, Jamshoro, Sindh) discussing the “Water resources of the Indus River System”
Video Link: <https://www.youtube.com/watch?v=71BvwRjY0Hs>
- **Dr. Muhammad Zia Hashmi** (Global Change Impact Centre, Pakistan) discussing “The Pakistan's waters in the times of Climate emergency: Turning challenges into opportunity”
Video Link: <https://www.youtube.com/watch?v=23sNwNpQi9I>
- **Prof. Bob Reynolds, Prof. Qasim Jan, Dr. Irfan U. Jan** and others. Panel Discussion and Summary of the Indus Water System Webinar.
Video Link: <https://www.youtube.com/watch?v=zfGtqYjWRoI>

11. Journal Editorships

11.1. Editor-in-Chief of the “*Journal of Himalayan Earth Sciences*” (A Scopus and Web of Science Indexed journal) since Jan., 2019 to December, 2020.

11.2. Editor of the “*Journal of Himalayan Earth Sciences*” (an only geoscience category “X” recognized journal by HEC, in Pakistan) since May, 2011 to December, 2018.

Key Responsibilities:

- Editorial of the journal and monitoring the key indicators of the journal’s progress, including timeliness, editing, publishing quality data and strictly monitoring the coherence of the journal with the international ethics for publications.
- Efforts to include the journal in the Commission on Publication Ethics (COPE).
- Increase the frequency of the journal from annual to biannual to triannual.
- Devising and refining authors, reviewers, subject editors and plagiarism policies for the journal and strictly monitoring the key performance indicators of the journal in line with the Higher Education Commission of Pakistan and Thomson Reuters’ (an international body) policies and journal selection process.
- Struggling to include the Journal of Himalayan Earth Sciences in the Thomson Reuters’ Journal Citation Report (JCR).
- Broadening the scope of the journal to include the Journal of Himalayan Earth Sciences in the Journal Citation Report, however, vigilantly monitoring the self-citation and taking measures to reduce the self-citation to the tolerable limit in line with the international practice.
- Devising online management system for the journal and making efficient and interactive journal management system.
- Increasing the visibility of the journal by indexing the journal in the world’s reputable Indexing and Abstracting agencies, such as SCOPUS and ELSEVIER.
- Managing the finances of the journal and maintaining cash flows.

11.3. Founding Advisory Board Member: *Journal of Mountain Area Research* (HEC category “Y” journal), since Jan., 2019 till date.

11.2. Member Editorial Board: *International Journal of Economic and Environmental Geology* (HEC category “Y” journal), since Jan., 2020 till date.

12. Referee on International and National Journals

1. *Geologica Sinica* (English Edition, Published by the China Academy of Sciences, China).
2. *Stratigraphy* (Springer Publishers).
3. *Arabian Journal of Geosciences* (Published by the King Fahad Petroleum University, Kingdom of Saudi Arabia).
4. *Journal of Earth System and Sciences* (Published by the Indian Academy of Sciences, India).
5. *Journal of Earth Science Research* (Published by the Bowen Publisher, USA).
6. *Acta Geologica Polonica* (Published by the Faculty of Geology, University of Warsaw, Poland).
7. *Indonesian Journal on Geoscience* (Published by the Geological Agency, Indonesia).
8. *Journal of Himalayan Earth Sciences* (Published by NCE in Geology, University of Peshawar).
9. *Peshawar University Teachers Association Journals* (Published by the University of Peshawar).
10. *Pakistan Agriculture Research Council Journal* (Published by the Pakistan Agriculture Research Council, Pakistan).
11. *Vietnam Journal of Earth Sciences* (Vietnam).

13. Courses Taught

1. *Clastic Sedimentology* (MS and BS level course).
2. *Palynology and Palynofacies Analysis* (PhD, MS and BS level course).
3. *Technical Writing (Research Methodology)* (PhD, MS and BS level course).
4. *Continental Environment and Facies* (PhD and MS level course).
5. *Seminar (Teaching/Research of selected topics: Environmental Geology/PhD and MS level courses)*.
6. *Sequence Stratigraphy* (PhD level course).

14. National Policy Making Roles

1. Member the Higher Education Commission of Pakistan’s Panel of the Quality Assurance Agency for evaluating multidisciplinary and natural sciences journals of the country (2015-2018).
2. Member the Higher Education Commission of Pakistan’s University Curriculum Committee (Geology & Geophysics).
3. Subject Expert Selection Board, Abdul Wali Khan University Mardan, Pakistan.
4. Subject Expert Contract Selection Committee, Bacha Khan University, Charsadda, Pakistan.
5. Member Scrutiny Committee for Lecturers, University of Swat, Swat, Pakistan.
6. Co-opted member Selection Board Karakoram International University, Gilgit Baltistan.

7. Member NCE In Geology, University of Peshawar PC-4 Compilation Committee of the Strengthening Project NCE in Geology, University of Peshawar, Pakistan (Project Cost= 900 millions PKR).
8. Member FATA University, Peshawar committee for the purchase of instruments for Geology Department.

15. Academic Committees Roles

1. In-charge Academics, NCE in Geology, University of Peshawar to look after curriculum, scheme of studies, exam, scholarship and other academics related matters (5-9-2019- 5-5-2019).
2. Member Board of Faculty, Faculty of Life and Environmental Sciences, University of Peshawar, Pakistan (01-10-2018 to 30-09-2021).
3. Member Graduate Studies Committee (MS and PhD), Centre of Disaster Management and Preparedness, University of Peshawar, Pakistan.
4. Member Board of Studies, Bacha Khan University Charsadda, Pakistan (2016-19).
5. Member Board of Studies, Khushal Khan Khattak University, Karak, Pakistan (2016-19).
6. Member Graduate Studies Committee (MS and PhD), Department of Geology, University of Peshawar.
7. Member NCE in Geology Academic Committee.
8. Member NCE in Geology Graduate Admission Committee.

16. Administrative Roles

1. In-charge Administration, NCE in Geology, University of Peshawar to look after general administration, IT, Laboratory, Transport, Security, Library, ORIC, QEC, Maintenance and other operational matters of the Centre (5-2-2019 to 5-9-2019).
2. Warden at University of Peshawar B Block Hostel.
3. Senior Warden, NCE In Geology, University of Peshawar, Pakistan.
4. Member NCE In Geology Selection and Promotion Committee, Pakistan.
5. Member NCE In Geology, University of Peshawar Construction Committee of the Mega Project and Faculty Flats.
6. Member NCE In Geology, University of Peshawar Construction Committee for Approach Road Project.
7. Member NCE In Geology, University of Peshawar Construction Committee on External Work.
8. Member NCE In Geology, University of Peshawar Mega Project Committee on Furniture.
9. Manager/In-charge "Sedimentology Laboratory", NCE in Geology, University of Peshawar.
10. Member NCE in Geology Space Committee.
11. Member NCE in Geology committees designated by the Board of Governors NCE in Geology, University for various tasks (including but not restricted to budget and upgradations).

17. Institutional/Business Development/Strengthening and Human Resource Development

1. Established through funded projects (as Principal Investigator), state-of-the-art "**Sedimentology and Palynology Laboratory**" at the National Centre of Excellence in Geology, University of Peshawar, holding instruments worth **50 millions PKR**. The laboratory stands out unique and

first in the country, where palynological processes are established. The laboratory extends services (both in research projects and commercial consultancies) to various universities of Pakistan (namely; Bacha Khan University, Charsadda, Abdul Wali Khan University, Mardan, Khushal Khattak University, Karak, Bahria University, Islamabad, Islamia College University, Peshawar, Haripur University, Haripur, Swat University, Swat, Swabi University, Swabi, University of Malakand, Malakand, KP, COMSATS, Islamabad, Pakistan), Oil and Gas Industries (namely; OGDCL, Islamabad, Mari Petroleum, Islamabad, Shangai Petroleum, Islamabad MOL, B.V, Islamabad, Pakistan and Ocean Petroleum Limited, Islamabad, Pakistan) and Limestone Industry of Pakistan. The laboratory strictly follows the principles of health, safety, and environment and is completely self-sustainable generating enough funds to meet its yearly expenses and contribute to the annual budget of the institute. The accreditation of the laboratory is underway.

2. Co-Established a state-of-the-art **"Scanning Electron Microscopy, Energy Dispersive Spectroscopy and Cathodoluminescence Microscopy Laboratory"** at the National Centre of Excellence in Geology, University of Peshawar holding instruments worth 50 millions PKR.
3. Guided and mentored the following MS students under supervision/mentorship on various funded research projects as "Research Assistants/Associates" and "Laboratory Technicians" who gained significant knowledge of laboratory processing techniques, instrumentation, samples analysis, and manuscript/report writing which gave them an opportunity to develop into successful independent researchers and find honourable jobs after completion;

S. No.	Programme	Scholar Name	Hiring Institute/Organization
1.	MS	Mr. Hafiz Shahid Hussain	Completed MS and hired as Assistant Professor of Geology, University of Malakand, Malakand, KP, Pakistan. Currently perusing PhD at Mari Curie University, Australia.
2.	MS	Mr. Azeem Shah	Completed MS and hired as Lecturer (Geology), Haripur University, Haripur, KP, Pakistan.
3.	MS	Mr. Babar Siddique	Completed MS and hired as Resident Geologist, Water and Power Development Authority (WAPDA), Pakistan.
4.	MS	Mr. Muhammad Ishaq	Completed MS and hired as Lecturer (Geology), Swabi University, Swabi, KP, Pakistan.
5.	MS	Mr. Naveed Akhtar	Completed MS and hired as Assistant Director, Mineral Development Department, KP, Pakistan.
6.	MS	Mr. Nasar Khan	Completed MS and hired as Lecturer (Geology), University of Malakand, Malakand, KP, Pakistan. Currently perusing PhD at Mari Curie University, Belgian.
7.	MS	Mr. Mukhtiar Ghani	Completed MS and hired as Assistant Director, Geological Survey of Pakistan.
8.	MS	Mr. Ahmad Zeeshan	Completed MS and hired as Lecturer (Geology), Bacha Khan University, Charsadda, KP, Pakistan.
9.	MS	Mr. Waqar Ahmad	Completed MS and hired in the Police Services Forensic Laboratory, KP, Pakistan.
10.	MS	Mr. Subhanullah	Completed MS and hired as Lecturer (Geology), Swat University, Swat, KP, Pakistan.
11.	MS	Mr. Sohail Qaiser	Completed MS and hired as Geologist at the Frontier Works Organization (FWO), Pakistan.
12.	MS	Mr. Attaullah	Completed MS and hired as Lecturer (Geography/Geology), Govt Post Graduate College, Swat
13.	MS	Mr. Abdullah Khan	Completed MS and hired as Geologist at the Hydrocarbon Development Institute of Pakistan, Islamabad, Pakistan

14.	MS	Mr. Abdullah	Completed MS and hired as Geologist at the Water and Power Development Authority (WAPDA), Pakistan.
15.	PhD	Dr. Syed Irfanullah Hashmi	Completed PhD as a main supervisor and hired as Geologist at the Energy and Power Development Authority, KP, Pakistan.
16.	PhD	Ms. Shehla Sattar	Completed PhD as a co-supervisor and hired as Lecturer at the Department of Environmental Sciences, University of Swabi, KP, Pakistan.
17.	PhD	Dr. Shuja Ullah	Completed PhD as a main supervisor and hired as Research Assistant at the National Centre of Excellence in Geology, University of Peshawar, Pakistan.

18. Commercial Geology Consulting/Advisory Conducted

18.1. Consulting Experience

18.1.1. Orient Petroleum Limited, Pakistan

Lead Consultant Geologist for Orient Petroleum Limited, Islamabad, Pakistan Ltd. (in the Marwat Exploration Lease/Block, Pakistan): Performed the geological studies of the Marwat Exploration Lease/Block for Orient Petroleum Limited, Islamabad, Pakistan (**Business Generated= 16.6 millions PKR**).

Lead Consultant Biostratigrapher for Hot-Shot Biostratigraphy projects and Case Studies of the Zamzama Oil Field for Orient Petroleum Limited, Islamabad, Pakistan: The tasks included resolving biostratigraphic problems, stratigraphic complexities and marking formation tops in the highly heterogenous Paleogene strata of the Lower Indus Basin, Pakistan (**Business Generated = 1.5 million PKR**).

18.1.2. MOL. B.V. Pakistan

Lead Consultant Biostratigrapher for MOL B. V., Pakistan in their Tolanj Field, Upper Indus Basin (Kohat sub-basin), Pakistan: The tasks included resolving biostratigraphic problems, stratigraphic complexities and marking formation tops in the highly deformed Late Mesozoic to Paleogene strata of the Kohat sub-basin, Pakistan (**Business Generated = 1.5 million PKR**).

18.1.3. Mari Petroleum Company Limited, Pakistan

Lead Consultant Geologist for Mari Petroleum Company Limited, Pakistan (Harnai Exploration Block, Balochistan, Pakistan): Performed the geological studies of the Harnai Block for Mari Petroleum Company Limited, Islamabad, Pakistan (**Business Generated = 8.5 million PKR**).

Consultant biostratigrapher for the complicated horizons in the Banu West Exploratory Well.

18.1.4. Shengkai Petroleum Limited, Pakistan

Lead Consultant Biostratigrapher for Shangkai Petroleum Limited, Pakistan on several well projects and well cuttings (**Business Generated = 0.5 million PKR**).

18.1.5. Oil and Gas Facilitation Unit, Department of Energy and Power, KP, Pakistan

Lead Advisor/Consultant for Oil and Gas Facilitation Unit, Department of Energy and Power, KP, Pakistan in identifying new leases in the Frontier and Tribal Regions of Pakistan. The tasks included investigating the outcrop samples from the South Waziristan and Khyber Agencies to understand their hydrocarbon assessment, diagenetic studies and suitability for the oil and gas exploration for future blocks in the non-leased regions (**Business Generated = 5 million PKR**).

18.1.6. OMNI, MHARAJ and CAD GROUPS (limestone reserve estimation and mapping)

Lead Consultant on numerous projects with these companies on structural interpretation, lithological mapping & reserve estimation of limestone deposits for establishment of cement industries in their respective target/lease areas. Projects completed details are given as follows;

18.1.6.1. Geological assessment, structural interpretation & reserve estimation of limestone deposits, Maroba, Nizampur, Khyber Pakhtunkhwa, Pakistan.

18.1.6.2. Geological assessment, structural interpretation, & reserve estimation of limestone deposits, Rehmani Kheil, D.I. Khan, Khyber Pakhtunkhwa, Pakistan.

18.1.6.3. Geological assessment of Limestone Deposits for Cement Industry at Banda Kheji, D. I. Khan, Khyber Pakhtunkhwa, Pakistan.

18.1.6.4. Geological assessment of Limestone Deposits for Cement Industry at Gumbat ,Kohat, Khyber Pakhtunkhwa, Pakistan.

18.1.7. OIL AND GAS DEVELOPMENT COMPANY LIMITED, PAKISTAN

Lead and Associated Consultant Biostratigrapher for Oil and Gas Development Company Limited, Pakistan on several Oil and Gas Fields in the Upper and Lower Indus basins, Pakistan.

18.2. Wining Funds through synergies

1. Generated **2 million PKR** funds for the 3 days International Conference on Earth Sciences Pakistan: 2016 as Chief Organizer, including funds from the oil companies (i.e. Mari Petroleum, Pakistan Petroleum Limited and Oil and Gas Company Limited, Pakistan), international bodies (i.e. COMSTECH), the Higher Education Commission, Pakistan, and govt. bodies (such as Pakistan Mineral Development Company Limited), and small and large entrepreneurs (i.e. Glow-Pak International, Habib Bank Limited, Pakistan, Medent Corporation, Lakhra Coal Limited, Saindak Metals Limited and National Scientific Corporation).
2. Secured an annual **0.5 to 0.7 million PKR** funds (2013- till date) from the Higher Education Commission of Pakistan to manage/publish the “Journal of Himalayan Earth Sciences a HEC, Pakistan Category “X journal”, based on best performance of the journal in editing, publishing and attracting high impact articles and satisfying audit and technical reviews from the HEC experts.
3. Devised the Financial Sustainability Model for the Journal of Himalayan Earth Sciences with the introduction of processing fee, advertisements and subscriptions of the journal with the philosophy to reduce burden on public funds for the operations of the journal.
4. Devised the Financial Sustainability Model for the Sedimentology and Palaeontology Laboratory at the National Centre of Excellence in Geology, University of Peshawar.

19. International/National Workshops/Trainings/Courses Attended

1. The Asian Council of Sciences Editors’ annual conference and workshop on “Improving Your Journal Quality” and “Bibliometrics for Editors” August 10-11th, 2016, Dubai, Carlton Palace Hotel, U.A.E.
2. USAID funded 2 days workshop on “Capacity Building of Staff of the Higher Education Institutes” October 9-10th, 2015, Margalla Hotel, Islamabad, Pakistan.
3. British Council funded 4 days workshop on “Strengthening Kabul University, shared experience from Afghanistan, Pakistan, Kurdistan, Iraq, United Kingdom, Germany and Czech Republic” December 8-11th 2011, University of Leicester, United Kingdom.
4. TNO organised Pollen and Spore Master Class, 16-20th August 2010, Utrecht, The Netherlands (Terrestrially derived palynoflora: Subsurface Application to Petroleum Geology).
5. 6th Urbino Summer School on Palaeoclimatology, July 23th-August 5th, 2009. University of Urbino Italy (Geochemical and biological proxies in the palaeoclimatology).

6. CIOPPINO 2009 workshop on Transient Changes in Past Warm Climates, 1st August 2009. University of Urbino Italy.
7. The British Geological Survey's Workshop on the "Geological deposits of Greece", 8 to 18th May, 2009, Milos Island, Greece.
8. Earth quake vulnerability Multi-hazard risk assessment, 13 to 31st March, 2006, National Centre of Excellence in Geology, University of Peshawar, Pakistan.
9. Geo-Services Oil & Gas South Asia training for the well site geologists, 7-18th March, 2005, Abu Dhabi Training Institute UAE.

20. International/National Professional Bodies Memberships

1. Fellow Geological Society of London (GSL).
2. The British Micropalaeontological Society (TMS).
3. The Palaeontological Association (PALASS).
4. The Commission Internationale de la Microflora du Palaeozoique (CIMP).
5. The Society of Petroleum Engineers (SPE).
6. The Pakistan Association of Petroleum Geoscientists (Faculty coordinator and Oil and Gas industry-NCEG liaison).
7. Member Asian Council of Science Editors (ASCE).
8. Provisional member of the Association of Professional Engineers and Geoscientists of Alberta, Canada.

21. International Scientific Collaborations

1. Chinese University of Geosciences Wuhan, China (Working on the Permo-Triassic succession of Pakistan).
2. Pune University, India (Working on the Cambrian ichnofossils from Pakistan).
3. British Geological Survey, United Kingdom (Working on the Permian successions of Pakistan and Arabia).
4. Regina University, Canada (Working on the Permian successions of Pakistan).
5. Auckland Technical University, New Zealand (Working on the institutional strengthening in Pakistan).
6. University of Leicester, United Kingdom (Working on the Permian successions of Pakistan).
7. Vienna University, Austria (Working on the Jurassic successions of Pakistan and anthropogenic climate change).
8. Marie Curie University, Australia (Working on the Palaeocene-Eocene Thermal Maximum with relation to the organic productivity, Pakistan).
9. Houston, University, USA (Working on shale gas potential of Pakistan; Jurassic to Eocene).
10. Kagoshima University, Korimoto, Kagoshima, Japan (Working on the Ordovician sediments of Peshawar Basin, Pakistan).
11. Keel University, United Kingdom (Working on fractured carbonate reservoirs and their subsurface analogues in the thrust tectonic regime of Pakistan).

22. Science Popularization

1. Stephenson, M. H. **Jan, I. U.** (2013) Palynological evidence for diachroneity in the basal Khuff Formation clastics in the Middle East. Subcomission on Permian Stratigraphy newsletter, *Permophiles*, **57**, 15-19.
2. Stephenson, M. H. **Jan, I. U.** Al-Mashaikie, S. 2012. Comparison and palynological correlation of Pennsylvanian glaciogene rocks in Oman, Yemen and Pakistan. *The Commission Internationale de la Microflora du Palaeozoique's newsletter*, **79**, 16.
3. **Jan I. U.** 2012. In front of the Himalayas: new discoveries in the Salt Range of Pakistan. *The Commission Internationale de la Microflora du Palaeozoique's newsletter*, **79**, 22-23.
4. **Jan. I. U.** 2010. Urbino Summer School in Palaeoclimatology, Italy, 2009. *UK-Integrated Ocean Drilling Programme Annual newsletter*, **35**, 37.
5. **Jan. I. U.** 2010. Developments in the Carboniferous-Permian palynology and regional palynostratigraphic correlation of the Salt Range, Pakistan. Report submitted to the Geological Society of London for 2010 Edmund Johnson Fund.
6. Stephenson, M. H. **Jan, I. U.** Al-Mashaikie, S. 2009. Advances in Permian palynological correlation in the southern Tethys. Subcomission on Permian Stratigraphy newsletter, *Permophiles*, **54**, 24-25.

23. Abstract Volumes Edited/Co-Edited

1. Co-Edited the Journal of Himalayan Earth Sciences Special Volume, 2016 (SUN-R).
2. Edited the Abstract Volume "Earth Sciences Pakistan 2016", 15 to 17th July, 2016 (Baragali Summer Campus, University of Peshawar, Pakistan).
3. Co-Edited the Abstract Volume "Earth Sciences Pakistan 2014", 29 to 31st August, 2014 (Baragali Summer Campus, University of Peshawar, Pakistan).
4. Co-Edited the Abstract Volume 29th Himalayan-Karakoram-Tibet Conference, 2 to 4th September 2014 (Lucca, Italy).

24. Research Papers

24.1. Impact Factor Journals (JCR and HEC recognized "W" Category)

24.1.1. Papers In Press/Submitted

1. **Jan I. U.** Naveed, K et al., Sedimentological and petrophysical analysis of the Cambrian Khewra Sandstone, Upper Indus Basin, Pakistan. *Journal of Earth System Science*.
2. **Jan I. U.** Qaiser et al., Bulk organic geochemical and palynofacies analyses of the Eocene Nammal Formation, Potwar Basin, Pakistan: A hydrocarbon bearing perspective assessment. *Journal of Earth System Science*.
3. **Jan, I. U et al.**, 3-D stratigraphic facies and reservoir modelling of the Middle to Late Permian Strata, Upper Indus Basin, Pakistan; An analogue for the Arabian Permian reservoirs, *Journal of Asian Earth Sciences*.

24.1.2. Papers Published

1. Ullah, S. **Jan, I.U.** Hanif, M. Latif , K. Mohibullah, M. Sabba, M. Anees, A. Ashraf, U. Thanh, H. V. Paleoenvironmental and Bio-Sequence Stratigraphic Analysis of the Cretaceous Pelagic Carbonates of Eastern Tethys, Sulaiman Range, Pakistan. <https://doi.org/10.3390/min12080946>. *Minerals*, (Impact Factor= 2.88).

2. Khan, M. Y, Hwang, J. Min, D-J, Turab, S. **Jan, I. U.** (In Press) Synthetic modeling and field ground penetrating radar (GPR) survey to understand the near-surface deformation induced by co-seismic groundwater dynamics following the 2019 Mirpur Earthquake, Pakistan. ***The Leading Edge***, (Impact Factor= 1.535).
3. Younis, K. Awais K, Hussain, F. Hussain, M & **Jan, I. U.** Pore pressure prediction in a carbonate reservoir: A case study from Potwar Plateau, Pakistan. ***Journal of Petroleum Exploration and Production Technology***. <https://doi.org/10.1007/s13202-022-01511-3>.
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24. 2. Scopus and Thomson Reuters Indexed Journals (HEC recognized "X" Category)

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25. Published Conference Proceedings and Abstracts

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2. Ghani, M. **Jan, I. U.** Ahmad, S. Hashmi, S. I. U. Subsurface Radiogenic Heat Production Modeling in the Upper Indus Basin, Pakistan; A Geothermal Perspective of Sedimentary Basins. Proceedings World Geothermal Congress 2020+1 Reykjavik, Iceland, April - October 2021. Page 1-11.
3. Khan, N. Swennen, R. Weltje, G. J. **Jan, I. U.** (In Press) Depositional Environment and Diagenetic Evolution of the Paleocene Patala Formation, Potwar Basin, Pakistan: Implication for Shale Gas Potential (Accepted: European Geophysical Union General Assembly 2021).
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16. Khan, U. R. **Jan, I. U.** & Shah, A. Dynamics of climate change on crop productivity and food security in Pakistan. *Abstract Volume 2nd International Conference on Sustainable Utilization of Natural Resources SUN-R 2016*, 13.
17. Akhtar, N. **Jan, I. U.** Hanif, M. Ahmad, I. & Ishaq, M. Paleoenvironmental setting of the early Cambrian Khewra Sandstone, eastern Salt Range, Pakistan. *Abstract Volume Earth Sciences Pakistan: 2016*, 15.
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32. Iqbal, S. **Jan, I. U.** & Akhter, G. (Accepted) Palaeoenvironmental analysis of the Jurassic Datta Formation, Salt Range, Pakistan. *30th International Association of Sedimentologists meeting, Manchester University.*
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26. Keynote /Invited Talks

1. Invited talk on “Journal and Bibliometrics” at the 2nd ICETEMS conference organized by the City University of Science and Information Technology, Peshawar.
2. Keynote talk on “Scholarly Journals and their Selection” at the 3rd ICETEMS organized by the Karakoram International University, Gilgit Baltistan.
3. Invited talk on “The Geological Wonders of Pakistan: Offering Sites for Tourism” at the First International Conference on Mountaineering, Eco-Tourism, and Hospitality, held at Karakoram International University, Gilgit Baltistan, 2019.

27. PhD and MS Students honored in various international competitions (under my Supervision/Mentorship)

S. No.	Scholar Name	Program of Study	Hiring Institute/Organization
1.	Mr. Mukhtiar Ghani	PhD Program	Received 1 st prize and position among 50 competitors in the “Oil and Gas Horizon 2020” held at Russia; https://www.oilandgashorizons.ru/ titled ““Petrophysical and associated reservoirs rock properties of Later Permian Chhidru Formation, SR, Pakistan”.

2.	Mr. Ahmad Zeeshan	MS Program	Received 1 st position and prize in PAPG-ATC organized Annual Technical Conference 2017 held at Islamabad, Pakistan.
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27. References

1. Professor Attaullah Shah (Personal Reference / Brother), Vice Chancellor, Karakoram International University, Gilgit Baltistan, Pakistan
Email: vc@kiu.edu.pk
2. Professor M. Asif Khan (Professional Reference), Former Vice Chancellor, University of Peshawar, Pakistan
Email: masifk9@gmail.com
3. Professor Michael Stephenson (Professional Reference), Executive Chief Scientist at the British Geological Survey, United Kingdom
Email: mhste@bgs.ac.uk
4. Professor Osman Salad Hersi (Professional Reference), Graduate Program Coordinator, Department of Geology, University of Regina, Canada.
Email: Osman.Salad.Hersi@uregina.ca